



BRITISH COLUMBIA,

ITS

Resources and Capabilities.

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BRITISH COLUMBIA.

If one is moved to enthusiasm in contemplating the great future of other provinces of the Dominion, the mind is struck with wonder in endeavoring to grasp the possibilities that lie before the province on the Pacific. All the great natural features of the other provinces, the level prairies of the Northwest alone excepted, are reproduced here on a magnified scale. In mere geographical extent British Columbia is the largest in the confederation. It has an area of 341,305 miles, or about 357,000, including Vancouver Island, and thus equals the area of France, Italy, Belgium and Holland all put together. It has a greater variety of climate than all the other provinces together, for the upper slopes of the Rockies are as cold as Labrador, while on the southern coast oranges were last year ripened in the open air. Its wonderful coast line; its unrivaled fisheries; its stupendous forests, many trees of which measure 8 to 10 feet in diameter; its incalculable wealth in those minerals which are the most valued and most necessary to man; and its peculiar geographical position on the Pacific Ocean all mark out the province of British Columbia as one of the imperial realms of the future.

DISCOVERY AND SETTLEMENT.

In the year 1792—by a coincidence just 300 years after the discovery of America by Columbus,—the ship Columbia of Boston, commanded by Capt. Gray, sailed into the mouth of the noble river upon which he bestowed the name of his vessel, and which afterwards gave the name to the province of British Columbia, where its head stream lies, and through which it runs for a course of 440 miles. Long before this it had been known to the Spanish navigators who called it the St. Roe, but it was not till 1811 that its main course was navigated by the astronomer of the Northwest Fur Trading Company. In the year that Capt. Gray saw the mouth of the Columbia, a hardy Scotchman named Simon Fraser joined his fortunes to the North West Co., and in 1805-7 was sent on the first expedition across the Canadian Rockies, to explore the country beyond and open up trade with the Indians. He discovered the river which took his name, and having established trading posts, assumed sovereignty of the country in the name of his company, under whose control it remained till its fusion with

the Hudson Bay Co. in 1821. It was also in 1792 that Capt. Vancouver of the Royal Navy sailed up the Pacific, and gave his name to Vancouver Island which he discovered, and which proved to be the largest on the west coast of America. Although discovered so long ago, it was not till 1843 that a permanent settlement was made on Vancouver Island by the Hudson Bay Co., who in that year built a fort and trading post on the spot where the beautiful city of Victoria now stands. Six years later this settlement developed into the colony of Vancouver. The mainland of British Columbia remained a wilderness with two or three fur trading posts till in 1858, some gold prospectors advanced up the coast and discovered the rich diggings of the Fraser River. The influx of people was so great that the region was erected into a crown colony in the same year, under the name of British Columbia. In 1866 the two colonies were united, and in 1871 the province joined the Confederation of Canada. In that year the population of the Province was only 36,247 including the Indians. Now it is about 100,000, and is rapidly increasing as the varied and exhaustless resources of the country are becoming known to the world. The increase by immigration alone in 1888 was estimated at 11,000.

GEOGRAPHICAL POSITION.

British Columbia is nearly a parallelogram in shape, being about 760 miles long north and south, and about 500 broad. For about 300 miles down the coast from the north, a very narrow strip of the United States Territory of Alaska intervenes between it and the sea; but even with this strip cut off it has a coast line, reckoning its wonderful labyrinth of bays and inlets, of perhaps 2,000 miles. It is noteworthy that while from San Francisco to Cape Flattery on the American coast there is not a single harbor for ocean ships, good harbors can be found by the dozen in British Columbia, both on the mainland and Vancouver Island. The scenery of the coast is unlike that of any shore yet discovered, and was thus graphically pictured by Lord Dufferin when he visited it in 1876:

"Such a spectacle as its coast line presents is not to be paralleled by any country in the world. Day after day for a whole week, in a vessel of nearly 2,000 tons, we threaded an interminable labyrinth of watery lanes and reaches that wound endlessly in and out of a network of islands, promontories, and peninsulas, for thousands of miles, unruffled by the slightest swell from the adjoining ocean, and presenting at every turn an ever-shifting combination of rock, verdure, forest, glacier and snow-capped mountain of unrivalled grandeur and beauty. When it is re-

membered that this wonderful system of navigation, equally well adapted to the largest line of battle-ship and the frailest canoe, fringes the entire seaboard of your province, and communicates at points, sometimes more than a hundred miles from the coast, with a multitude of valleys stretching eastward into the interior, while at the same time it is furnished with innumerable harbors on either hand, one is lost in admiration at the facilities for inter-communication which are thus provided for the future inhabitants of this wonderful region."

These wonderful natural features of the coast lead one to consider the advantages of British Columbia's position with reference to the ocean traffic of the future. It juts out from North-West America as Great Britain juts out from Europe. The comparatively favorable distances across the ocean to Japan, China, and Australia, the direction of the trade winds, the open harbors, the stores of coal, the immense fertile region through which the Canadian Pacific Railway reaches the seaboard of British Columbia—linking the Pacific Ocean to the system of the St. Lawrence navigation on the eastern side of the American Continent—are facts extremely favorable to the growth of a widely extended commerce. The opening of the Panama Canal, also, would have a marked influence, commercially, on the future of the North West of America.

The distance from Japan, China or the Pacific Coast generally to Liverpool is from 1,000 to 1,200 miles less by the Canadian route than by the American railways. In reference to this point, Professor Maury, an American, writes :—

"The trade-winds place Vancouver Island on the wayside of the road from China and Japan to San Francisco so completely, that a trading vessel under canvas to the latter place would take the same route as if she was bound for Vancouver Island—so that all return cargoes would naturally come there in order to save two or three weeks, besides risks and expenses."

It must, however, be clearly understood that this advantage, equivalent to the distance between Vancouver Island and San Francisco, viz., about 700 miles, is independent of and in addition to, the saving of direct distances by the Canadian route given above.

These very important facts of position in relation to distances are very much heightened by the further fact of the possession of important stores of Coal on the Canadian Pacific Coast, and the plains east of the Rocky Mountains. This is put in a striking manner by Sir Charles Dilke, in his book entitled "Greater Britain." Sir Charles says :—

"The position of the various stores of coal in the Pacific is of extreme importance as an index to the future distribution of power in that portion of the world ;

but it is not enough to know where coal is to be found, without looking also to the quantity, quality, cheapness of labor, and facility of transport. In China and in Borneo there are extensive coal fields, but they lie 'the wrong way' for trade; on the other hand, the California and Monte Diablo, San Diego and Monterey coal lies well, but is of bad quality. Tasmania has good coal, but in no great quantity, and the beds nearest the coast are formed of inferior anthracite. The three countries of the Pacific, which must, for a time at least, rise to manufacturing greatness, are Japan, Vancouver Island and New South Wales; but which of these will become wealthiest and most powerful depends mainly on the amount of coal which they respectively possess, so situated as to be cheaply raised. The dearth of labor under which Vancouver suffers will be removed by the opening of the Pacific Railroad; but for the present New South Wales has the cheapest labor, and upon her shores at Newcastle are abundant stores of coal of good quality for manufacturing purposes, although for sea use it burns 'dirtily' and too fast. * * * The future of the Pacific shores is inevitably brilliant, but it is not New Zealand, the centre of the water hemisphere, which will occupy the position that England has taken on the Atlantic, but some country such as Japan or Vancouver jutting out into the ocean from Asia or from America, as England juts out from Europe."

The question of pre-eminence in the future ocean trade would seem to be settled by the coal deposits. These are inexhaustible in this province, and as to quality Dr. Dawson reports that at a test made by officers of the American Government to ascertain the sources of the best coal on the Pacific coast, it was found that to produce a given power in steam, 1,800 lbs. of Nanaimo or Wellington (B.C.) coal were equal to 2,400 lbs. of Seattle (U.S.), to 2,600 lbs. Oregon coal, and to the same of California coal. This is corroborated also by the preference given to it by steamship owners, and by the fact that nearly two-thirds of the coal received at San Francisco by sea comes from Vancouver Island. Indeed indications of this future greatness in maritime trade are already apparent. In 1886 the exports of B. C. amounted to about \$3,000,000, or four times those of Manitoba, and nearly three times those of Ontario per head of population. They consisted of gold, coal, salmon and other fish, timber, furs, etc., and reached the markets of Great Britain, the United States, Mexico, South American States, Japan, Australia and Africa. The opening of the direct line of steamships to China and Japan has since increased this foreign trade, and is a further justification for anticipating a great future maritime traffic.

CLIMATE AND GEOGRAPHY.

Regarding the climate we quote the following from a description appearing in *West Star*, published at Portland, Oregon:—

The general surface of the country is mountainous and broken, consisting of short ranges, detached groups of mountains, elevated plateaus, and many valleys of various extent. Running parallel with the Rocky Mountains, and in many places scarcely distinguishable from them are masses of mountains, and along the coast lies a high range usually indicated as a continuation of the Cascades, but in fact a northern extension of the great Coast Range. Lying between these two, and extending as far north as latitude 55.30 degrees, is an irregular belt of elevated plateau. Beyond this the interior mountains decrease in height, and the land has a gentle slope toward the Arctic Ocean. Peace River and other streams of the Arctic watershed find their sources there. Down the centre of the plateau flows the Fraser River, its general course being south until almost to the international line, where it turns sharply to the west and enters the ocean. The other great streams of the interior are Thompson River, entering the Fraser from the east, and the Okanagan, Columbia and Kootenay, the last two having very eccentric courses. The Columbia rises almost in the extreme southeastern corner, sweeps northerly around the upper end of the Selkirk Range, and then flows directly south between the Selkirk and Gold mountains into the United States. The Kootenay has its source in the same region, makes a long sweep to the south, crossing the boundary line, and returning again, discharges its waters into the former stream. Lakes and water courses abound from one end of the province to the other, many of them navigable by steamers of light draft for great distances.

Taken as a whole, the climate is much more moderate and equable than that of any other portion of the Dominion, each district enjoying cooler summers and milder winters than any region of a corresponding latitude lying east of the Rocky Mountains. Primarily the one great cause of this prevailing characteristic is the great ocean stream of warm water known as the "Japan Current." This great volume of comparatively warm water flows south along the coast of British Columbia. Perpetual summer reigns wherever the full influence of this great ocean river is felt. Even in the midst of winter the warm breezes from the sea steal over the islands and mainland, and penetrate far into the interior among the many valleys of the mountains, their modifying influence gradually lessening as they advance. In the regions fully subject to them flowers bloom, vegetation remains green and bright, and there is little save the almanac and increased rainfall to tell that winter is at hand. The warm, moisture-laden currents of air coming from the southwest meet the colder atmosphere from the north, and the result is frequent and copious rains during the winter season, the rainfall being much more abundant on the mainland coast than on the islands or in the interior.

The climate of the southeastern portion of Vancouver Island, the region in which Victoria is situated, is universally conceded to be the most delightful on the Pacific Coast. Here much less rain falls than on the adjacent mainland or upon the island further north, or the numerous small ones and the large ones of the Queen Charlotte group still further to the northward. Much of the moisture is taken from the atmosphere by the mountains lying between Victoria and the ocean, and the second precipitation does not occur until the winds strike the high lands of the opposite coast. Snow seldom falls, and then lies but a short time. The climate at that point is truly delightful, and is at all times invigorating. For a

period of three years the lowest temperature was 8 deg. and the highest 83.9, the annual mean being 55.6. During the same period the average fall of rain was 24.78 inches per year.

The climate of the mainland coast opposite Vancouver Island differs somewhat from that just described. In the summer the temperature averages slightly higher and in winter somewhat lower, while the rainfall is greater immediately along the coast, decreasing toward the interior. The Lower Fraser Valley (New Westminster District) does not receive in summer the cold breezes from the Olympian Mountains which blow across Victoria, nor does it receive in winter so much of the genial warmth of the warm ocean air. As a general thing ice forms on the river for a short time, and snow begins to fall in January and continues to do so intermittently till March, the ground not being continuously covered with it. The rainfall at New Westminster is somewhat greater than on the flats at the mouth of Fraser River. It is also less as the river is ascended until Hope is reached, where it is about the same as at New Westminster. These variations are due solely to local causes. Above Yale it decreases rapidly as the interior is penetrated. Observations for seven consecutive years at New Westminster showed the lowest temperature to be 7 deg. and the highest 92, with an annual mean of 47.9. The average yearly rainfall was 59.66 inches, including a precipitation of snow of 51.2 inches, equal to 4.27 inches of rain.

The climate of the interior, that portion of the province lying above and to the east of Yale, is radically different from that of the coast, being drier and subject to greater extremes of temperature, though not entirely beyond the soft influences of the Japan Current. The mountains along the coast relieve the ocean winds of their moisture, and the elevated plains of the interior are in consequence much drier than the coast and islands. The annual mean temperature does not differ much from that of the coast region, but the summer and winter extremes are much greater, and there is also much variation in different districts, owing to situation and local causes. The total precipitation of rain and snow is very small. Wherever there occurs a mountain barrier, there the fall of rain and snow is heavier at its western base and correspondingly light on the lee side. In the Gold and Selkirk ranges, in the southeastern portion of the province, the winters are more severe and snowfall heavier than in the lower and more open portions. In that part which may be classed as the "Southern Interior," the climate, as a whole, is milder than the northern districts. In summer the heat is sometimes very great, though sunstrokes are unknown, and the evenings and nights are rendered comfortable by cool mountain breezes. Winter weather continues about four months, the remainder of the year being quite agreeable and enjoyable. Snow seldom exceeds two and one-half feet in depth, and occasionally, in some localities, stock remain out the entire season, though the prudent farmer keeps a good supply of food for their use when necessary. The climate changes materially to the northward of the region just considered. The general surface of the country has a greater elevation, and the Cariboo and other mountain masses render it quite broken and rugged. The summers are quite warm but of shorter duration; winter continues longer and the fall of snow is heavier. The forests are denser and the trees of a larger growth. In the valley of the Fraser, within this district, the climate is

milder than that of the surrounding higher altitudes, and the atmosphere is drier, the valley and the benches and rolling hills and valleys of the western tributaries being covered with bunch grass.

SCENERY.

It may be imagined from what has already been said that the scenery of British Columbia is on a scale of vastness and grandeur unsurpassed in America. The views which are presented to the railway traveler through the magnificent passes of the Rockies, the Selkirks, the Gold Range and the Cascades are spoken of with admiration, but hunters and explorers tell us that these are but scenes in the entry of a theatre of stupendous views of nature in her sublimest aspects, many regions being yet unscanned by the eyes of a white man. Speaking of the scenery in the railway passes, a writer in a London journal says:—

“The convulsion of nature which piled up these gigantic masses of rock in distant ages has left gaps with almost vertical walls, through which the railway enters on its passage through the mountains. Before the surveyors penetrated these regions they were practically untrodden by man; and the trains now travel along precipices where, in bygone days, only the eagle could obtain a footing. There is no finer scenery in the world than among these mountains. During a journey through them the effect produced by their many beauties is almost bewildering, and an impression is left on the imagination which is not easily forgotten.”

Some of these mountains rise in pyramids 10,000 to 12,000 feet high; some have upon their huge backs single glaciers believed to be as large as all the glaciers of Switzerland combined; some present cliffs rising precipitously, for thousands of feet, and forming walls that stretch for miles before the eye. One such canyon along the Fraser extends for twenty miles. The bright green of the mountain valleys, the great forest trees on the mountain slopes, the deep torrential rivers fed from many a secluded mountain lake and stream, whose clear waters are covered at times with wild fowl and teem with edible fish are subjects that must be left to the artist, poet or sportsman of the future. One quotation may be given from the Marquis of Lorne's charming description of the coast scenery:—

“Along the shore of these oceans inlets grow wondrous specimens of the Douglas fir and gigantic cypress, to the height of 150 and 250 feet, and of a girth of 25 and 30 feet. These stand close to the water's edge, and it is on the borders of such sheltered coast that the tallest trees are found. Inland there are magnificent groves of the same species, clothing the valleys of the Columbia River, but the finest are to be seen near the sea, and it is to be earnestly desired that they may be preserved in some area chosen as a national park, that travelers may have the attraction of

visiting the tremendous aisles where the great shafts rise from the thickets of glossy-leaved shrubs, to be lost to sight in the dark green gloom above. I do not think there is any scenery more solemn and beautiful than the interior of such a grove. It wants, of course, the intense color and the sunlit glory of the liana-hung woods of the South, and the undergrowth is not so varied or bright. But the russets and browns, the greys and sombre greens, the purple tints on the straight stems varied by the vivid hues of the moss, which provides a compass for the wanderer, because it grows most abundantly on the side which feels the western sea moisture,—all are most delicious to the eye. And overhanging the sea margin, in crannies of the rocky bays or covering the jutting promontories, are the beautiful madrona-trees, the large-leaved arbutus, with the trunks as red as coral. All this forest is ever-green. Winter strips the scattered maples of their autumnal fire, but makes little change on the steep slopes of these deep lochs."

MINERALS.

The experience of miners and the data collected during the last ten years by the geological officers of the Dominion government establish the existence of vast mineral wealth in British Columbia; and when the country is opened up and the cost of labor and supplies lessened, the variety and amount of its products will not be excelled by any part of the two Americas. The mineral products now known and mined are gold, coal, silver, iron, copper, galena, mercury, cinnibar, platinum, antimony, bismuth, molybdenum, plumbago, salt, and mica, while other minerals are being discovered from time to time as new regions are explored. So high an authority as Dr. Dawson says that as yet "British Columbia can scarcely be said to have more than begun the development of its mining industries."

Of the gold bearing rocks here, the same authority says: "There is little reason to doubt that they are geologically equivalent to the gold bearing rocks of California." He proceeds to say:—

"Gold is known to be almost universally distributed in the Province of British Columbia. There is scarcely a stream of any size in any part of the Province that one cannot wash a few 'colors,' out of, at the very least; and in 105 localities, which I catalogued in 1877, actual mining had been carried on for gold. The main auriferous belt of British Columbia runs from south-east to north-west, just inside the Rocky Mountain, and includes the mining localities which have been called Kootenay, Big Bend, Cariboo, Omenica and Cassiar. From south to north, from 1858 to 1882, the gold produced in British Columbia amounted to \$46,685,334, which is a great return, considering that the average population of the Province, taking the period altogether, would not exceed about 10,000 whites. The average number of miners employed in these placer diggings has been 2,940, and the average yield per man employed, obtained by dividing the

total by the number of miners, \$683 per man per annum. It should be also considered that these placer deposits are, as a rule, only to be worked in summer, and that the sum stated was earned in less than half the year of actual work. The greatest yield of any one year was in 1864, when \$3,735,850 was sent out of the country. Last year the total yield was only \$1,013,827. Since 1864, with occasional fluctuations, the yield of gold has shown a general tendency to decline, and the state of the country at present is simply this: The richer placer mines so far discovered having been more or less worked out, the gold yield is falling off. Such placers have been more or less completely exhausted, early in the history of gold-mining countries, as in Australia and California. Then the period comes when the miner goes to work on the quartz lodes, whence the gold in the placer mines has been derived. That period has not arrived yet in British Columbia. There is not a single auriferous quartz vein worked there yet, and the present is the interim period between the full development of placer mines and the beginning of the quartz mining, which is a more permanent industry."

Considerable belts of auriferous rocks have been found also in Vancouver Island, and in Queen Charlotte Island. During the past year many new placer diggings have been found, and fresh Canadian and American capital is now being invested to bring in machinery and develop the rich quartz ledges.

We have already shown the superiority of the coal of this province; and the widely spread and inexhaustible beds are being developed so steadily that it may soon rank first in the mining industries. In twelve years preceding 1874 the total exports of coal were only 150,000 tons or 12,500 tons per annum. In that year 81,000 were exported, and in 1884 the output had grown to 394,070 tons, of which 245,478 tons were exported. The exports in 1888 were 400,000 valued at \$2,400,000. At Nanaimo, in Vancouver Island, the industry has reached its greatest proportions. The quality and kind varies in different localities from common lignite to anthracite, of which beds extend from 20 to 100 miles. Most of the coal found is admirably suited for steam purposes, and the steam shipping trade of the Pacific now turns to British Columbia for its supplies. The total output of the Nanaimo mines in 1888, including exports and home consumption, was 487,784 tons.

On Texada Island, only 20 miles from the Comox coal fields, and near the mines of Nanaimo and Wellington are vast masses of rich magnetic iron, which assays 68.4 of pure iron with little sulphur and impurities. Gold and silver bearing quartz leads have recently been discovered on this island, which are likely to become of great value.

On the American border are to be found large quantities of hematite, and the existence of these three minerals in such a combination and in such quantities points to the development of an iron industry whose dimensions no man can gauge. One of its features in the future may naturally be the iron ship building industry. As a beginning of the iron industry, smelting works are now being erected at Vancouver.

Silver has been found, near Hope, on the Fraser River. The specimens of ore assayed have given high yields of silver. It has also been found at Yale, on the Fraser, and a rich silver ore has been brought from Cherry Creek, a tributary of the Shuswap. Native silver has been found at Omenica, in the northern interior, and argentiferous galenas at Omenica and Kootenay. Professor Selwyn states that there is every reason to believe that rich mines of silver will be opened in the province. Specimens received by the Geological Survey, from the Rocky Mountains, show a high percentage.

Copper has been discovered in a great many localities, both inland and on the coast. Seventeen are mentioned in the Geological Survey report. The Howe Sound mine is considered by Dr. Dawson as the most promising.

Galena has been found in many parts of the Province in connection with gold, and Cinnabar has been obtained in the gold washings on Fraser river and the Hope silver ores. Rich Cinnabar ore was found on the Homathco in small quantities.

Mercury and Platinum have also been found, but as yet in small quantities.

Specimens of Antimony and of Bismuth have been found at Shuswap Lake; of Molybdenum near Howe's Sound and on the upper part of the Cowitchan River, and of Plumbago in Vancouver Island.

Salt Springs are found on Admiral Island, Shoal Bay, Vancouver, and salt is also found on the Chilcotin and Mazco Rivers, but little is known of these or their capabilities for use.

The land and mining regulations are referred to later on.

THE FISHERIES.

The fisheries, like the minerals, have yet to be developed. The salmon of the British Columbia rivers are now known throughout the world, it is true; but the value of the deep sea fisheries of this

coast is scarcely yet understood by even the British Columbians themselves. The principal fish are salmon, cod (each of these two having several species), shad, whitefish, bass, flounder, skate, sole, halibut, sturgeon, oolachan, herring, trout, haddock, smelts, anchovies, dogfish, pike, perch, sardines, oysters, crayfish, shrimps, crabs and mussels. The whale, seal and sea otter fisheries are also important branches of the province's marine products. Although the rivers, lakes, and sea coasts teem with these fish, many of the species mentioned have not yet either entered into the local markets or figured among the exports, for want of men and capital to open up the trade. The subject, however, has begun to attract the attention of the fishermen of the Atlantic coasts and of Europe, and within the next few years the work of distributing these vast living stores of food over the world will begin. The fishery products of the province are already remarkable, considering the small population yet engaged in the trade. The exports of fish and fish products from Victoria alone, in the year ending June, 1888, were \$1,159,504 in value, and the total yield including the consumption by Indians is over \$5,000,000, the official estimates in 1886 being \$4,834,848.

The salmon of British Columbia are famous. At the proper seasons some of the rivers are so full of them that the local saying, "you can walk across the river upon their backs," seems scarcely a hyperbole. There are 21 factories for making canned salmon, 12 of them being on the Fraser, and their annual output is from 150,000 to 200,000 cases (each containing forty-eight 1 lb. tins), with 4000 to 5000 barrels of salt salmon. The take of salmon from the Fraser alone is over 8,000,000 lbs., exclusive of what the Indians procure. Fresh salmon, as well as tinned salmon, are now being shipped frozen to the markets of eastern America and England.

A remarkable British Columbia fish is the oolachan or candle fish. It is smaller than a herring, and so oily that when dried it will burn like a candle. They are caught chiefly in the Nass and Fraser rivers. They enter the Fraser about the first of May. They are delicious when fresh, smoked or salted, and their oil is considered superior to cod liver oil or any other fish oil known. It is of a whitish tint, and about the consistency of thin lard, and is a staple food among the natives, and an article of barter between the Indians of the coast and the interior tribes. These fish begin running in the Nass about the last of March, and enter the stream by the million for several weeks. The various Indian tribes of that region assem-

ble on its banks, and catch them in immense numbers. The fish are taken in purse nets, frequently a canoe load at a single haul, and are piled in bins on the shore. They are then placed in bins made of plank, and having sheet iron bottoms, holding from three to five barrels, and are boiled in water about four hours. The concoction is then strained through baskets, made from willow roots, and the oil is run into red cedar boxes of about fifteen gallons capacity each. When the run of fish is good, each tribe will put up about twenty boxes of oil. Before the introduction of sheet iron bottoms for their tanks, the Indians boiled the fish by throwing heated stones into the tank. There is no doubt that this undeniably valuable article will soon become one of the regular products of the province, for exportation in quantity, as it is even now, to a limited extent. *

Another fish destined to be of great commercial value is the Skil or black cod, which is caught in 150 to 300 fathoms of water, and at some distance from the shore. It is pronounced to be superior to the true cod, both in quality of meat and value of oil, and is found between Vancouver and Queen Charlotte Islands in countless numbers. Two schooner loads brought down in 1888 have been so favorably reported on, that large preparations are being made to prosecute the industry.

Want of space forbids a detailed account of the industry, but all the different kinds of fish before enumerated promise profitable employment to capital. Several of these fish are remarkably rich in oil, the dogfish among others yielding a valuable lubricating oil which is now being manufactured for export, the product in 1887 being 67,000 gallons.

The British Columbia oysters, though small, are of very fine flavor, as are also the shrimps.

The sealing industry is already extensive, and will be more so when an amicable arrangement is come to between the governments of Great Britain and the States, regarding fishing rights in the northern waters, as affected by the monopolistic claims of the Alaska Commercial Company. The catch of seals by British Columbia sealers in 1887 was 33,800 valued at \$236,600, that of 1888 being, owing to adverse weather, only 24,790, valued at \$173,530.

FORESTS.

The immense forest wealth of the province is now beginning to be

* West Shore, June, 1887.

opened up by the establishment of saw mills and wood working factories. In 1881, the exports of timber were valued at \$162,747, in 1888 the exports of lumber were valued at \$527,371, and the total quantity of timber cut about 140,000,000 ft. This was an increase of 40,000,000 ft. over 1887, and shipments were made to Asia, Australia, Africa and South America. The principal trees consist of the Douglas fir, spruce, white pine, hemlock, maple, oak, cedar, tamarac, poplar, ash, cherry, yew, arbutus, dogwood, and others, some of the foregoing having several varieties.

Among these trees, one of the most celebrated is the Douglas fir or pine. It frequently grows over 300 feet high, with a diameter of 8 to 9 feet. It is admirably suited for ship building, as well as for general purposes, owing to its strength and straightness. Masts have been cut 130 feet long and 42 inches in diameter, hewn octagonally. It is often obtained 150 feet free from knots, and has squared forty-five inches for a length of 90 ft. It is thought to be the strongest pine, or fir, in existence. Broken in a gale, the stem is splintered to a height of at least twenty feet, and it is astonishing to see how small a portion of the trunk will withstand the leverage of the whole tree. The timber contains a great deal of rosin, and is exceedingly durable. The grain is coarse, but exceedingly tough and tenacious. It will bear more weight than oak. A piece one foot long and one inch square, supported at the ends, requires a weight of six hundred and thirty-eight pounds to break it; oak requiring but five hundred and fifty, and maple five hundred and eighty. Its mean crushing load, endwise, is seven thousand pounds to the square inch, and sidewise, seventeen hundred and fifty pounds. The bark resembles cork, and is often eight or nine inches thick.

Cedars sometimes attain a diameter of 17 feet, and it is of this tree that the Indians make their celebrated canoes. Dr. Dawson attributes the great size of the British Columbia trees to the mildness and humidity of the climate. There are 30 species of trees of greater or less commercial value. In tracts already explored, a Michigan lumberman, who recently visited the province, estimates that there are 40,000,000,000 to 50,000,000,000 feet of choice timber.

AGRICULTURAL AND HORTICULTURAL.

The Province of British Columbia cannot be called an agricultural country throughout its whole extent. But it possesses very great agricultural resources, especially in view of its mineral and other

sources of wealth, as well as its position. It possesses tracts of arable land of very great extent. A portion of these, however, requires artificial irrigation. This is easily obtained, and not expensive, and lands so irrigated are of very great fertility. The tracts of land suitable for grazing purposes are of almost endless extent, and the climate very favorable, shelter being only required for sheep, and even this not in ordinary seasons. On the Cariboo road there is a plain 150 miles long, and 60 or 80 wide, and between the Thompson and Fraser rivers there is an immense tract of arable and grazing land. The hills and plains are covered with bunch grass, on which the cattle and horses live all winter, and its nutritive qualities are said to exceed the celebrated blue grass and clover of Virginia. Between 5,000 and 6,000 square miles of the Peace river prairie land is within this province. The wheat shown here often yields 30 to 40 bushels per acre.

Besides the mainland there are on Vancouver Island about 1,000,000 acres of land well suited to agriculture, and on Queen Charlotte Islands about 100,000 acres, most of this being now covered with dense forests. The total agricultural land of the province cannot yet be even approximately estimated. British Columbia produces all the fruits of the temperate zone, in fine quality and size. The industry is only in its infancy, but A. McD. Allan, president of the Ontario Fruit Growers Association, visiting the province in 1888, predicted a great future in this branch. At a local fair at Chilliwack, in this year, 75 varieties of fruit were shown, most of them being pronounced equal to the California products. Among various kinds of vegetables shown was a squash weighing 100 lbs., and a pumpkin weighing 157 lbs.

COMMUNICATIONS.

On every hand the visitor to this province is struck with evidences that only men, railways and working capital are wanted to open up the vast treasures of nature lying stored within its limits. The era of local railway building has now begun. Among these enterprises, one of the most important is the Westminster Southern, which, it is expected, will be built this year, and which will connect Westminster with the cities of Puget Sound, and with the American Pacific coast system, thus completing the connection from Canada to Mexico. It will be 126 miles long from the Fraser to Seattle, W.T. Final surveys have been made on a railway through the Shuswap and Oka-

nagan regions, 52 miles in length, with a connecting link on the lakes. The line enters splendid agricultural and mining districts, and is designed to reach to the Kootenay. Another proposed railway of great importance to the province is one opening up the great plateau between the Cascade and Selkirk Mountains. Still another is intended to connect Victoria with the mainland by means of a ferry. Work has been commenced on the Kootenay canal, which is to connect the upper Kootenay river with the headwaters of the Columbia river by Lake Columbia. It will afford steamer communication for a stretch of 200 miles, and give access to one of the richest mineral districts of the province.

GENERAL INFORMATION.

Crown lands here are classed as surveyed or unsurveyed lands, and may be acquired by "record" and pre-emption or by purchase. A British subject over 18 years may record unsurveyed and unoccupied crown lands and aliens may do so on declaring their intention to become British subjects. The quantity of land may not exceed 320 acres in the district north and east of the Cascade or coast mountains, or 160 acres in the rest of the province; and only one such claim can be held at a time. The fee on recording is \$2. Crown grants in fee simple may be obtained after improvements.

The price of Crown lands pre-empted is \$1 per acre, which may be paid in four equal instalments. The Crown grant excludes gold and silver ore, and reserves to the Crown a royalty of 5 cts. per ton on every ton of merchantable coal raised or gotten from the land, not including dross or fine slack. It also reserves to the Crown, since the 7th April, 1887, all timber on the land, except for domestic purposes. A pre-emptor, however, can obtain a license to cut the timber of his pre-emption on payment of dues at the rate of 25 cts. per 1,000 feet board measurement. No Crown grant can be issued to an alien who may have recorded or pre-empted by virtue of his declaring his intention to become a British subject, unless he has become naturalized. The heirs or devisees of the homestead settler are, if resident in the province, entitled to the Crown grant, on his decease.

Vacant surveyed lands, which are not the sites of towns or the suburbs thereof, and not Indian settlements, may be purchased at the rate of \$2.50 per acre, and lands so purchased must be paid for at the time of purchase.

The applicant to purchase unsurveyed Crown lands, after staking, posting, &c., must give two months' notice of his intended application in the Government Gazette, or a newspaper of the district.

He must also have the land surveyed at his own expense, by an approved surveyor.

The price is \$2.50 per acre, to be paid as follows :—10 per cent. at the time of application, and 90 per cent. on completion and acceptance of survey. The quantity of land must be not less than 160 acres, nor more than 640 acres in any one district. The purchase must be completed within six months from application. No public lands of any kind that are chiefly valuable for timber are sold either by public auction or by private sale.

The farm and buildings, when registered as a homestead, cannot be taken for debt incurred after the registration ; they are free from seizure up to a value not greater than \$2,500 (£500) ; goods and chattels are also free up to \$500 (£100) ; cattle "farmed on shares" are also protected by an Exemption Act.

The following are chief points in the mining regulations :

"Free miners" only can have right or interest in mining claims or ditches. A "free miner" must be over 16 years of age. His certificate may be for one year (\$5), or three years (\$15), and is not transferable. He may enter and mine Crown lands, or, on making compensation, lands occupied for other than mining purposes. To recover wages, must have free miner's certificate.

Claims must be recorded (\$2.50), and re-recorded (\$2.50). Time allowed for record is three days after location, if within 10 miles of office—one additional day for every additional 10 miles, or fraction thereof. In very remote places, miners assembled in meeting may make valid rules temporarily. Transfers of claims or mining interests must be in writing and registered.

A free miner can only hold two claims by pre-emption, but may purchase any number. Claims must be, as far as possible, rectangular, and must be staked. The sizes are :—"Bar diggings," 100 feet wide at high water mark, extending into the river to the lowest water level. "Dry diggings," 100 feet square. "Creek Claims," 100 feet long in general direction of stream and in width from base to base of the hill or bench each side. But if the hills or benches are not 100 feet apart, then the claim shall be 100 feet square. "Bench Claims," 100 feet square. "Mineral Claims," containing or supposed to contain minerals (other than coal) in lodes or veins, 1,500

BRITISH COLUMBIA FOREST SCENE.



feet long by 600 feet wide. Discoverers of new mines allowed 300 feet long for each discoverer. "Creek discovery claims," 1,000 each side of the centre, or as far as the summit.

A twelve months' prospecting license for 480 acres of vacant coal land, in one block, may be granted by the Government on payment of \$25. The licenses may be extended for another year, if the licensee has actually explored for coal, on payment of \$50. The license is not transferable without notice being given to the Chief Commissioner of Lands and Works. If a licensee wishes to purchase the coal lands, he may do so under the said Land Act at \$2.50 per acre.

The following are features of the Public School system :

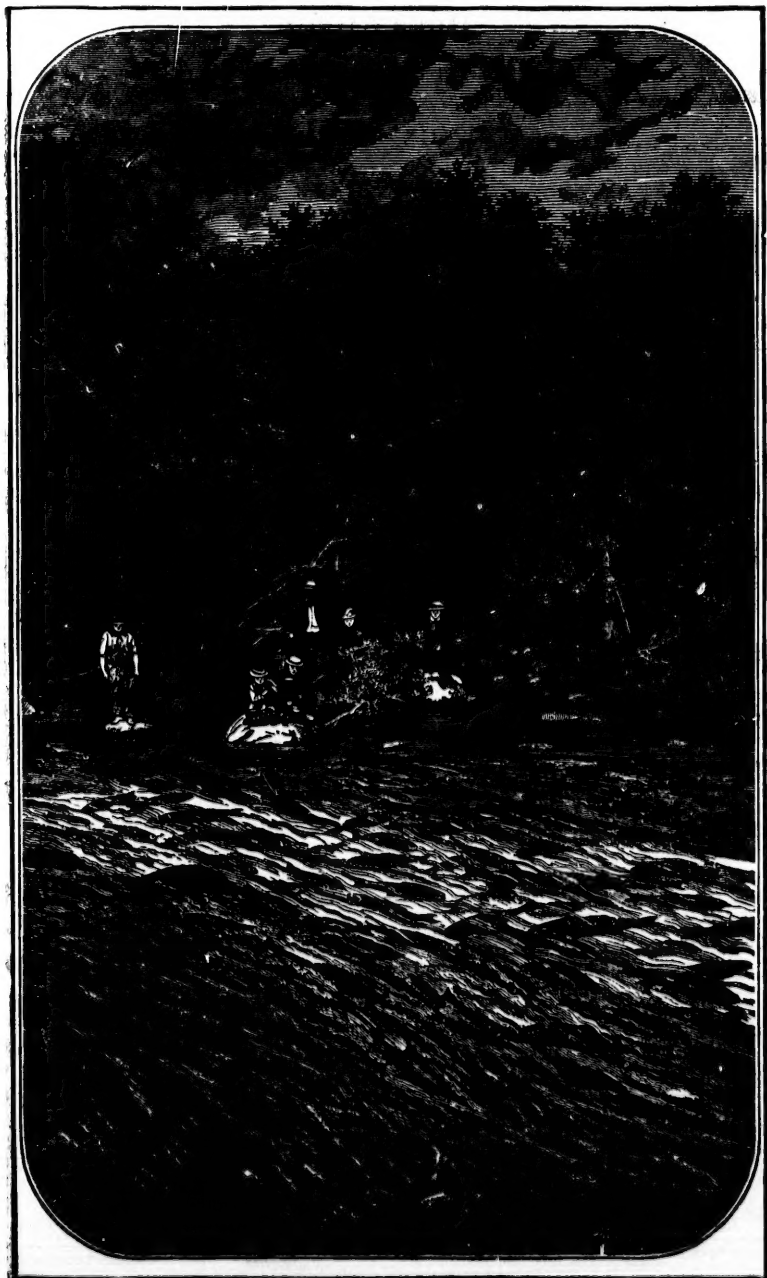
The Public Schools are in the hands of the people—non-sectarian and free to all, without distinction of race or creed—uniform textbooks—Public School Fund voted every year by the Provincial Assembly. School Districts may be formed where there are 15 pupils between 5 and 15 years—the people choose every year from among themselves three School Trustees or six in cities, to manage schools—Female suffrage in the election of Trustees—Trustees get money from "Public School Fund," on application endorsed by Superintendent of Education—Teachers, three grades—appointed or removed by Trustees—must have certificates of qualification from the Department of Education.

The paid banking capital of British Columbia is \$2,433,333, exclusive of private banking business. The value of the exports of the province in 1888 was \$3,928,077, and of the imports \$3,509,951. This shows a trade far larger in proportion to population than any province of the Dominion. Taking the item of exports, the shipments per head of population in 1888 were as follows: British Columbia, \$39; Quebec, \$26; N. B., \$23; N.S., \$17; Ont., \$15; P. E. I., \$10; Manitoba, \$9.

The province has its own legislature controlling its local affair.

It consists of a Lieutenant-Governor, appointed by the Governor-General of Canada, an Executive Council of four members, and a Legislative Assembly of twenty-five members, elected by the people for a term of four years. In practice the Executive Council holds office at the will of the Assembly. There are thirteen districts for electoral purposes. A short period of residence, with registration, qualifies voters.

For purposes of municipal government, the people of a rural locality with over 30 male residents may be formed into a "Municipa-



A BRITISH COLUMBIA SALMON RIVER.

lity," and may elect from among themselves Councilors and a Warden to manage all local affairs.

WAGES IN B. C.

Stonecutters, stonemasons, and bricklayers.	\$4 00 to 5 00 per day.
Their laborers.....	1 75 to 2 00 "
Plasterers	4 00 to 4 50 "
Carpenters and joiners	2 50 to 3 50 "
Ship carpenters and caulkers	4 00 to 5 00 "
Cabinet makers and upholsterers	3 00 "
Painters	3 50 to 4 00 "
Shoemakers	2 00 to 3 00 "
Tailors.....	2 50 to 3 00 "
Tailoresses	1 00 to 1 50 "
Bakers (with board and lodging).....	65 00 per m o.
Putchers (cutters).....	75 00 to 1 00 00 "
Slaughtermen	75 00 "
Cigarmakers	2 50 to 4 00 per day.
Boys, as strippers &c, from.....	2 00 to 5 00 per wk.
Printers.....	45 & 50 cts. a 1000 ems.
Waggon-makers.....	3 50 to 4 00 per day.
Tinsmiths, plumbers and gasfitters.....	3 50 to 4 00 "
Machinists, moulders, pattern and boiler-makers, and blacksmiths.....	4 00 to 4 50 "
Longshoremen.....	50 cents an hour.
Female domestic servants.....	\$15 to \$25 per month.

Generally speaking supply in all lines is fully equal to demand.

More detailed information for intending settlers may be obtained on application to the Immigration Department, Victoria, B.C., or in England, to Mr. H. C. Beeton, agent general for the province, 36 Finsbury Circus, London.

Demand for female domestic servants is always far in excess of supply, and situations can be obtained readily.

